

IPW

DOCKET NO.: UPN-4377/P3152

PATENT



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re Application of:

David C. Myles, et al.

Application No.: 10/817,532

Filing Date: April 2, 2004

Confirmation No.: Not Yet Assigned

Group Art Unit: Not Yet Assigned

Examiner: Not Yet Assigned

For: **SYNTHETIC TECHNIQUES AND INTERMEDIATES FOR POLYHYDROXY
DIENYL LACTONES AND MIMICS THEREOF**

DATE OF DEPOSIT: June 7, 2004

I HEREBY CERTIFY THAT THIS PAPER IS BEING
DEPOSITED WITH THE UNITED STATES POSTAL
SERVICE AS FIRST CLASS MAIL, POSTAGE PREPAID,
ON THE DATE INDICATED ABOVE AND IS
ADDRESSED TO THE UNITED STATES PATENT AND
TRADEMARK OFFICE, P.O. BOX 1450, ALEXANDRIA,
VA 22313-1450.

TYPED NAME: Elizabeth A. McLoud

Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

INFORMATION DISCLOSURE STATEMENT

Pursuant to 37 CFR § 1.56 and in accordance with 37 CFR §§ 1.97-1.98, information relating to the above-identified application is hereby disclosed. Inclusion of information in this statement is not to be construed as an admission that this information is material as that term is defined in 37 CFR § 1.56(b).

- ☒ In accordance with § 1.97(b), since this Information Disclosure Statement is being filed either within three months of the filing date of the above-identified application, within three months of the date of entry into the national stage of

the above identified application as set forth in § 1.491, before the mailing date of a first Office Action on the merits of the above-identified application, or before the mailing date of a first Office Action after the filing of request for continued examination under § 1.114, no additional fee is required.

- ☐ In accordance with § 1.129(a), this Information Disclosure Statement is being filed in connection with ☐ the first or ☐ second After Final Submission, therefore:
- ☐ Certification in Accordance with § 1.97(e) is attached; or
- ☐ The fee of \$180.00 as set forth in § 1.17(p) is attached.
- ☐ In accordance with § 1.97(c), this Information Disclosure Statement is being filed after the period set forth in § 1.97(b) above but before the mailing date of either a Final Action under § 1.113 or a Notice of Allowance under § 1.311, or before an action that otherwise closes prosecution in the application, therefore:
- ☐ Certification in Accordance with § 1.97(e) is attached;
- or
- ☐ The fee of \$180.00 as set forth in § 1.17(p) is attached.
- ☐ In accordance with § 1.97(d), this Information Disclosure Statement is being filed after the mailing date of either a Final Action under § 1.113 or a Notice of Allowance under § 1.311 but before, or simultaneously with, the payment of the Issue Fee, therefore included are: Certification in Accordance with § 1.97(e); and the submission fee of \$180.00 as set forth in § 1.17(p).
- ☐ Copies of each of the references listed on the attached Form PTO-1449 are enclosed herewith.

- ☒ Copies of references listed on the attached Form PTO-1449 are enclosed herewith
- ☐ Copies of references listed on the attached Form PTO 1449 are not required to be submitted pursuant to the June 30, 2003 recent revisions to 37 CFR § 1.98(a)(2)(i).

EXCEPT THAT:

- ☒ In view of the voluminous nature of reference number 1, and the likelihood that this reference is available to the Examiner, a copy is not enclosed herewith.
- ☒ In accordance with § 1.98(d), copies of the following references listed on the attached Form PTO-1449 are not enclosed herewith because they were previously cited by or submitted to the U.S. Patent and Trademark Office in patent application(s) for which a claim for priority under 35 U.S.C. § 120 have been made in the instant application:
- ☐ Copies of references [list as appropriate] listed on the attached Form PTO-1449 were previously cited by or submitted to the Patent and Trademark Office in prior Application No. _____, filed _____.

Please charge any deficiency or credit any overpayment to Deposit Account No. 23-3050. This form is submitted in duplicate.

- ☐ The relevance of those listed references which are not in the English language is as follows:
- ☒ There are no listed references which are not in the English language.

Date:

June 7, 2004


Walter C. Frank
Registration No. 52,911

WOODCOCK WASHBURN LLP
One Liberty Place - 46th Floor
Philadelphia, PA 19103
Telephone: (215) 568-3100
Facsimile: (215) 568-3439



Form PTO-1449 Modified List of Patent and Publications Cited by Applicant (Use several sheets if necessary) U.S. Department of Commerce Patent and Trademark Office		Docket No. UPN-4377/P3152	Application No. 10/817,532
		Applicant David C. Myles, et al.	
		Filing Date April 2, 2004	Group Not Yet Assigned
		Confirmation No. Not Yet Assigned	
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)			
*	1	Greene, et al., <u>Protective Groups in Organic Synthesis</u> , 3 rd Ed., John Wiley & Sons, NY, 1999	
	2	Gunasekera, S.P., et al., "Discodermolide: a new bioactive polyhydroxylated lactone from the marine sponge <i>discodermia dissolute</i> ," <i>J. Org. Chem.</i> , 1990, 55, 4912-4915 (original article) (correction published in journal at: <i>J. Org. Chem.</i> , 1991, 56, page 1346)	
	3	Hung, D.T., et al., "(+)-discodermolide binds to microtubules in stoichiometric ratio to tubulin dimmers, blocks taxol binding and results in mitotic arrest," <i>Chem. & Biol.</i> , 1996, 3, 287-293	
	4	Hung, D.T., et al., "Distinct binding and cellular properties of synthetic (+)- and (-)-discodermolides," <i>Chem. & Biol.</i> , 1994, 1, 67-71	
	5	Longley, R.E., et al., "Discodermolide—a new, marine-derived immunosuppressive compound," <i>Transplantation</i> , 1991, 52(4), 650-656	
	6	Longley, R.E., et al., "Discodermolide—a new, marine-derived immunosuppressive compound," <i>Transplantation</i> , 1991, 52(4), 656-661	
	7	Longley, R.E., et al., "Immunosuppression by discodermolide," <i>Ann. N.Y. Acad. Sci.</i> , 1993, 696, 94-107	
	8	Martello, L.A., et al. "The relationship between taxol and (+)-discodermolide: synthetic analogs and modeling studies," <i>Chem. & Biol.</i> , 2001, 8, 843-855	
	9	Nerenberg, J.B., et al., "Total synthesis of the immunosuppressive agent," <i>J. Am. Chem. Soc.</i> , 1993, 115, 12621-12622	
	10	Smith, A.B., et al., "A practical improvement, enhancing the large-scale synthesis of (+)-discodermolide: a third-generation approach," <i>Org. Lett.</i> , 2003, 5(23), 4405-4408	
	11	ter Haar, E., et al., "Discodermolide, a cytotoxic marine agent that stabilizes microtubules more potently than taxol," <i>Biochemistry</i> , 1996, 35, 243-250	
EXAMINER		DATE CONSIDERED	

* A copy of this reference will not be forwarded to the U.S. Patent and Trademark Office since it is believed to be too voluminous and easily obtainable by the Examiner.



Form PTO-1449 Modified

List of Patent and Publications
Cited by Applicant
(Use several sheets if necessary)

U.S. Department of Commerce
Patent and Trademark Office

Docket No.
UPN-4377/P3152

Application No.
10/817,532

Applicant
David C. Myles, et al.

Filing Date
April 2, 2004

Group
Not Yet Assigned

Confirmation No.
Not Yet Assigned

U. S. PATENT DOCUMENTS

Examiner Initial		Document No.	Date	Name	Class	Subclass
	12	5,789,605	08/04/98	Smith, III, et al.	549	370
	13	6,031,133	02/29/00	Smith, III, et al.	564	170
	14	6,096,904	08/01/00	Smith, III, et al.	549	292
	15	6,242,616 B1	06/05/01	Smith, III, et al.	549	292
	16	2002/0103387 A1	08/01/02	Smith, III, et al.	549	292

FOREIGN PATENT DOCUMENTS

Examiner Initial		Document No.	Date	Country	Translation	
					YES	NO
	17	WO 03/013502 A1	02/20/03	PCT		

EXAMINER

DATE CONSIDERED